

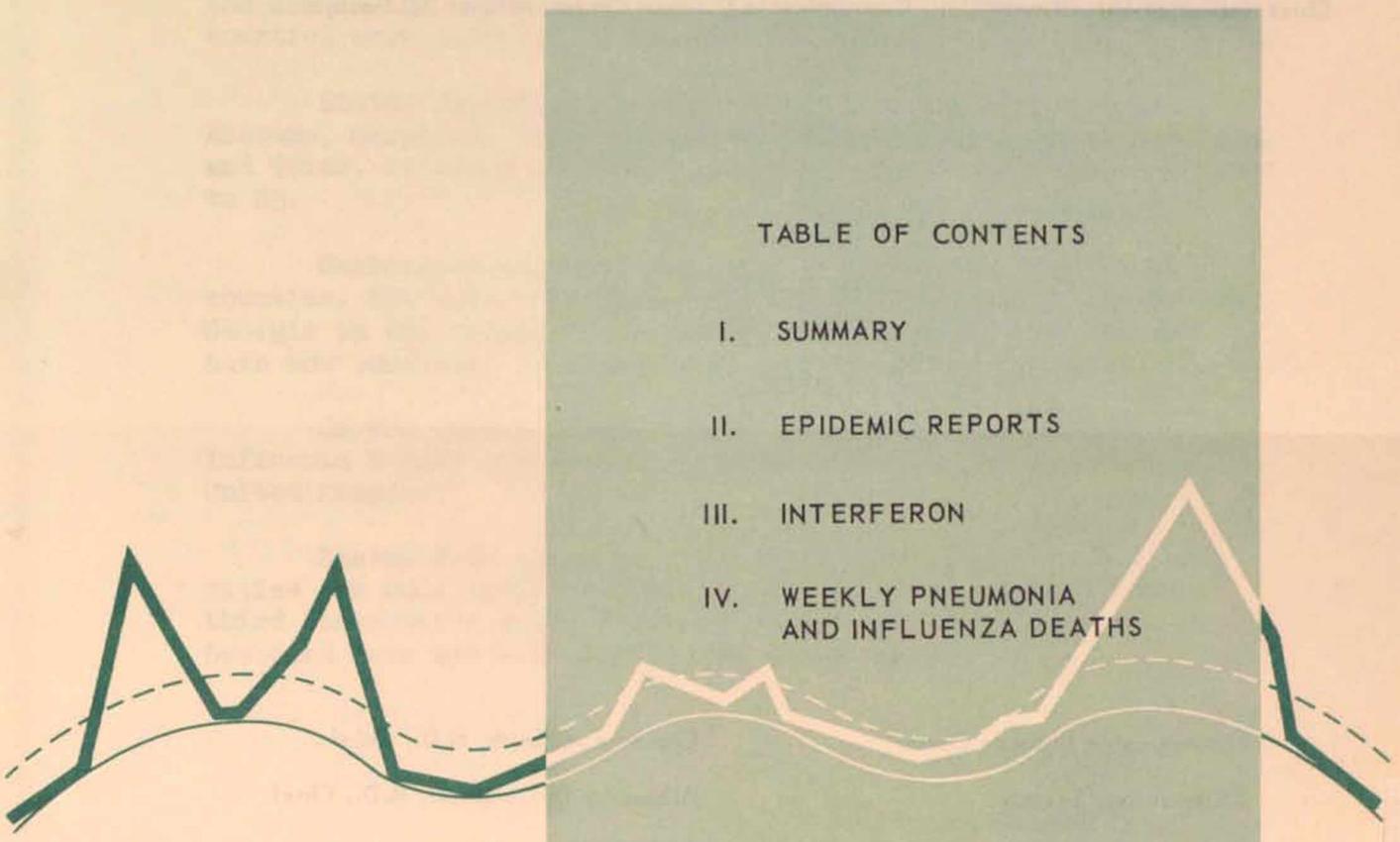
COMMUNICABLE DISEASE CENTER

# INFLUENZA

## SURVEILLANCE

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U. S. DEPARTMENT OF  
HEALTH, EDUCATION, AND WELFARE  
PUBLIC HEALTH SERVICE

# PREFACE

Summarized in this report is information received from State Health Departments, university investigators, virology laboratories and other pertinent sources, domestic and foreign. Much of the information is preliminary. It is intended primarily for the use of those with responsibility for disease control activities. Anyone desiring to quote this report should contact the original investigator for confirmation and interpretation.

Contributions to the Surveillance Report are most welcome. Please address to:  
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## I. SUMMARY

Outbreaks of acute febrile respiratory disease continue to span the United States in an arc from Southern California to Florida. Many new outbreaks have been reported, falling along the arc in the Midwest and in the Southeast. Numerous additional counties were involved in Georgia, Kansas, Kentucky, and Tennessee.

States reporting for the first time this week include Alabama, Maryland, North Carolina, Ohio, Oklahoma, South Carolina, and Texas, bringing the total number of States reporting outbreaks to 23.

Washington confirms Influenza B in several additional counties; New Mexico in one county by serologic titer rises; and Georgia in one county by isolation of the virus. Ten States have now confirmed Influenza B in suspect cases.

On the international scene, epidemics of confirmed Influenza B have been reported from Spain, Denmark and the United Kingdom.

Deaths from pneumonia and influenza in 108 United States cities are moderately elevated above expected levels for the third consecutive week. Reported deaths along the Eastern Seaboard have not exceeded normal levels as yet.

## II. EPIDEMIC REPORTS

### 1. ALABAMA

Schools in Montgomery and Mobile, Alabama have significantly increased school absenteeism, according to unofficial sources.

### 2. COLORADO

The incidence of acute febrile respiratory disease in epidemic form is diminishing in Colorado. Outbreaks from several corners of the State have reportedly reached their peak, and are now subsiding. Investigations of these outbreaks are continuing.

In southwest Colorado, several outbreaks were studied in some detail and have been reported in part (Influenza Surveillance Report Nos. 63 and 64). The outbreak in Durango (population 7500) was most apparent among school children. From a baseline school absentee rate of 3.8 percent for the first week in November, one school experienced a climb to 9.6 percent by mid-December where it remained for several weeks. An explanation for the lack of a sharp epidemic curve is afforded by analyzing the data by classroom. Each classroom had its own sharp peak, which in turn contributed to the elongated summit of the epidemic curve for the school as a whole.

Adults were surveyed by checking absentee rates at 5 business concerns in Durango, whose total employee population was 500. No increase in absences had been noted.

A fairly uniform clinical syndrome was encountered consisting of low grade fever (as high as 103°F in only 2 hospitalized patients), malaise, headache, vomiting, and mild sore throat. A persistent dry cough was a frequent symptom. The illness was mild: 57 percent of 211 absences at one school during the epidemic period lasted only one day; 25 percent were 2 or 3-day illnesses, and 15 percent lasted 4 or 5 days.

Complications were primarily respiratory. Hospitalization was mainly for bronchiolitis or pneumonitis, although otitis

media was commonly noted. One 4-year old white male, whose siblings had had an influenza-like syndrome, was hospitalized with aseptic meningitis.

An unusual opportunity to appraise vaccine efficacy was afforded by the presence, in Ignacio, Colorado, of a large number of Navaho Indian school children, all of whom had been immunized. It was possible to compare the influenza morbidity in this group with that of their non-immunized white schoolmates. All the Navaho children received 0.2 - 0.3 cc. influenza polyvalent vaccine intradermally either in a primary series of two injections this year, or as a single booster dose when indicated. Morbidity surveillance for these children is particularly good, due to the proximity of a Public Health Service Indian Health Clinic.

A comparison of numbers absent during the December 4-18 period between the two groups is shown below.

	<u>Navaho</u> <u>(Vaccinated Group)</u>		<u>Non-Navaho</u> <u>(Unvaccinated Group)</u>	
	<u>Total</u>	<u>Percent</u> <u>Absent</u>	<u>Total</u>	<u>Percent</u> <u>Absent</u>
Elementary School	74	8	319	53
Junior High School	77	47	197	61
High School	<u>38</u>	<u>11</u>	<u>141</u>	<u>56</u>
Total	189	24	657	56

(Dr. Cecil S. Mollohan, Chief, Section of Epidemiology, Colorado State Department of Public Health; Dr. Steve Leland, EIS Officer, assigned to the Colorado State Department of Public Health)

### 3. GEORGIA

Twenty counties throughout Georgia report increased school absenteeism, with little apparent adult involvement. Influenza-like illness began spreading after the New Year holiday, and is generally felt to be mild, although adult cases, when they occur, may be more severe. Several serologic studies are in progress. As previously reported, Type B influenza was isolated in the Atlanta area.

(Dr. W. J. Murphy, Director, Epidemiology, Georgia Department of Public Health)

### 4. ILLINOIS

Three counties in northern Illinois report the presence of influenza-like illness. The city of Evanston, in Cook County, has been maintaining surveillance through weekly reports from several schools and industrial concerns. School absenteeism is now ranging between 15 and 40 percent; 10 percent is estimated to be the normal winter absentee rate. No industrial absenteeism has been noted.

The University of Chicago reports the increased incidence of acute febrile respiratory disease at its clinics. Influenza B virus has been isolated from one student.

(Dr. Norman J. Rose, Chief, Bureau of Epidemiology, Illinois Department of Public Health; Dr. Edward Press, City Health Officer, Evanston, Illinois)

### 5. KANSAS

Fifteen counties in Kansas, predominantly in the southern part of the State, report acute respiratory illness above normal expectations. School absenteeism ranges between 15 and 50 percent with one school reporting 80 percent absenteeism.

(Dr. Don E. Wilcox, Director, Section of Epidemiology, Kansas State Board of Health)

## 6. KENTUCKY

A group of western counties in Kentucky, contiguous to States previously involved, report outbreaks of acute respiratory disease. Two types of clinical picture are apparent: the first is associated with high fever, general aching, abdominal cramps and vomiting, lasting 24-48 hours; the second is simply a severe head cold. School absenteeism ranges between 20 and 45 percent.

(Mr. Clifford Todd, State Epidemiologist, Kentucky State Department of Health)

## 7. MARYLAND

St. Mary's County, on a Potomac peninsula in southwest Maryland, reports the sudden rise of school absenteeism beginning January 19. At present, it continues to rise, with different schools ranging between 30 and 80 percent. Acute respiratory illness seems to be responsible. The number of cases among adults seems to be rising, but there are as yet no industrial absentee figures to corroborate this impression. Specimens are being collected for laboratory examination.

(Dr. John H. Janney, Acting Chief, Division of Epidemiology, Maryland State Department of Health)

## 8. MASSACHUSETTS

Commencing in towns along the Housatonic River in western Massachusetts, an influenza-like illness has spread to involve the entire southern half of Berkshire County. School children in all grades have been affected, but the disease appears to be milder among high school students.

Pittsfield, a town in the center of the County, is just beginning to experience increased school absenteeism. No other areas of the State are involved at this time.

(Dr. Nicholas Fiumara, Director, Division of Communicable Diseases, Massachusetts Department of Public Health)

9. MISSOURI

Acute respiratory outbreaks continue to spread slowly through the State. Several counties in the southwest portion of the State are now involved. Epidemiologic and laboratory investigations continue.

(Dr. E. A. Belden, Communicable Disease Control, Missouri Department of Public Health)

10. NEW MEXICO

Two patients in Las Cruces, on the Mexican border, developed significant serologic titer rises to Influenza B during the month of December. No increased school absenteeism has been reported from any part of the State.

(Dr. John B. Sherman, Director, Division of Preventive Medicine, New Mexico Department of Public Health)

11. NEW YORK

Acute respiratory illness is becoming generalized in elementary and junior high schools in Albany County. The median school absenteeism for the county on January 22 was 24 percent, which is considerably higher than the median reported last week - 14 percent. No extension of the outbreak has been reported.

(Dr. Robert M. Albrecht, Director, Epidemiology, New York State Department of Health)

12. NORTH CAROLINA

Acute febrile respiratory illness has been reported from the central part of North Carolina. Several cities have increased school absenteeism - Winston-Salem, Greensboro, and Raleigh. An epidemic in Robeson County, farther south, has been studied in some detail. Headache, fever, and severe myalgia were predominant symptoms. Severe epistaxis and reddened conjunctivae were noted in an unusual number of cases.

A telephone survey (120 persons) revealed roughly similar age-specific attack rates to those found in Hazelton, Iowa, and Potosi, Missouri. (See Influenza Surveillance Report No. 64, January 18, 1962)

Age Group	Number Surveyed	Number Ill	Attack Rate (Percent)	Number of Cases with:	
				Epistaxis	Conjunctivitis
0-5	16	10	63	1	0
6-12	24	12	50	4	3
13-18	20	12	60	7	3
19-35	18	6	33	1	1
36-50	23	5	22	0	0
51+	<u>19</u>	<u>2</u>	<u>11</u>	<u>0</u>	<u>0</u>
Totals	120	47	39	13	7

(Dr. Jacob Koomen, Assistant Director, Division of Epidemiology, North Carolina State Board of Health; Dr. George M. Johnson, EIS Officer assigned to North Carolina State Board of Health)

### 13. OHIO

Several outbreaks of upper respiratory disease compatible with influenza have occurred in school children and teachers in southwest Ohio. Some Cincinnati schools and three in adjacent counties have reported school absenteeism rates from 12-29 percent, commencing the second week of January.

(Dr. Winslow Bashe, Chief, Division of Communicable Diseases, Ohio Department of Health; Dr. Harold Decker, EIS Officer assigned to the Ohio Department of Health)

### 14. OKLAHOMA

Several counties in Oklahoma have had to close their schools. They are Caddo, Garfield, Muscogee, and Oklahoma

Counties. This is partially due to the presence of an increased amount of upper respiratory illness, but also to inclement weather.

(Dr. F. R. Hassler, Director, Division of Laboratories,  
Oklahoma State Department of Health)

15. PENNSYLVANIA

No reports of increased incidence of respiratory illness have been reported from Pennsylvania. However, the State Virus Diagnostic Laboratory reports a serologic titer rise to Influenza C. The patient, a 39-year old female, entered the Geisinger Medical Center in Danville, Pennsylvania in October with weakness and lymphadenopathy. A tentative diagnosis of "grippe" was made, and two serologies were taken, one month apart. Unfortunately, the acute serum was drawn 16 days after the onset of illness, and was already somewhat elevated. A definitive diagnosis of this case is impossible.

(Dr. I. F. Gratch, Chief, Epidemiology Section, Commonwealth  
of Pennsylvania Department of Health)

16. SOUTH CAROLINA

There has been some evidence of an increased incidence of acute respiratory disease in South Carolina during the past two weeks. The illness appears to be occurring in a number of scattered areas in the State but predominantly through the middle and the Piedmont section. It has not been sufficient to materially affect school attendance with the exception of one school in Chester County.

(Dr. G. E. McDaniel, Director, Division of Disease Control,  
State Board of Health of South Carolina)

17. TENNESSEE

Thirty-one of the 95 counties in Tennessee report the presence of influenza-like illness. The greatest concentration

of disease is in the center of the State. Schools are closed in 7 counties. Lincoln and Davidson Counties have confirmed outbreaks of Influenza B.

(Dr. Cecil B. Tucker, Director, Division of Preventable Diseases, Tennessee Department of Public Health)

18. TEXAS

Increased school absenteeism is reported from the City of Houston, apparently beginning during the second week of January.

(Dr. Van C. Tipton, Director, Communicable Disease Division, Texas State Department of Health)

19. WASHINGTON

Several additional counties have confirmed Influenza B. They are Okanogan, Clark, and Walla Walla Counties, situated at polar extremes within the State.

(Dr. Ernest Ager, Communicable Disease Control, Washington State Department of Health)

INTERNATIONAL

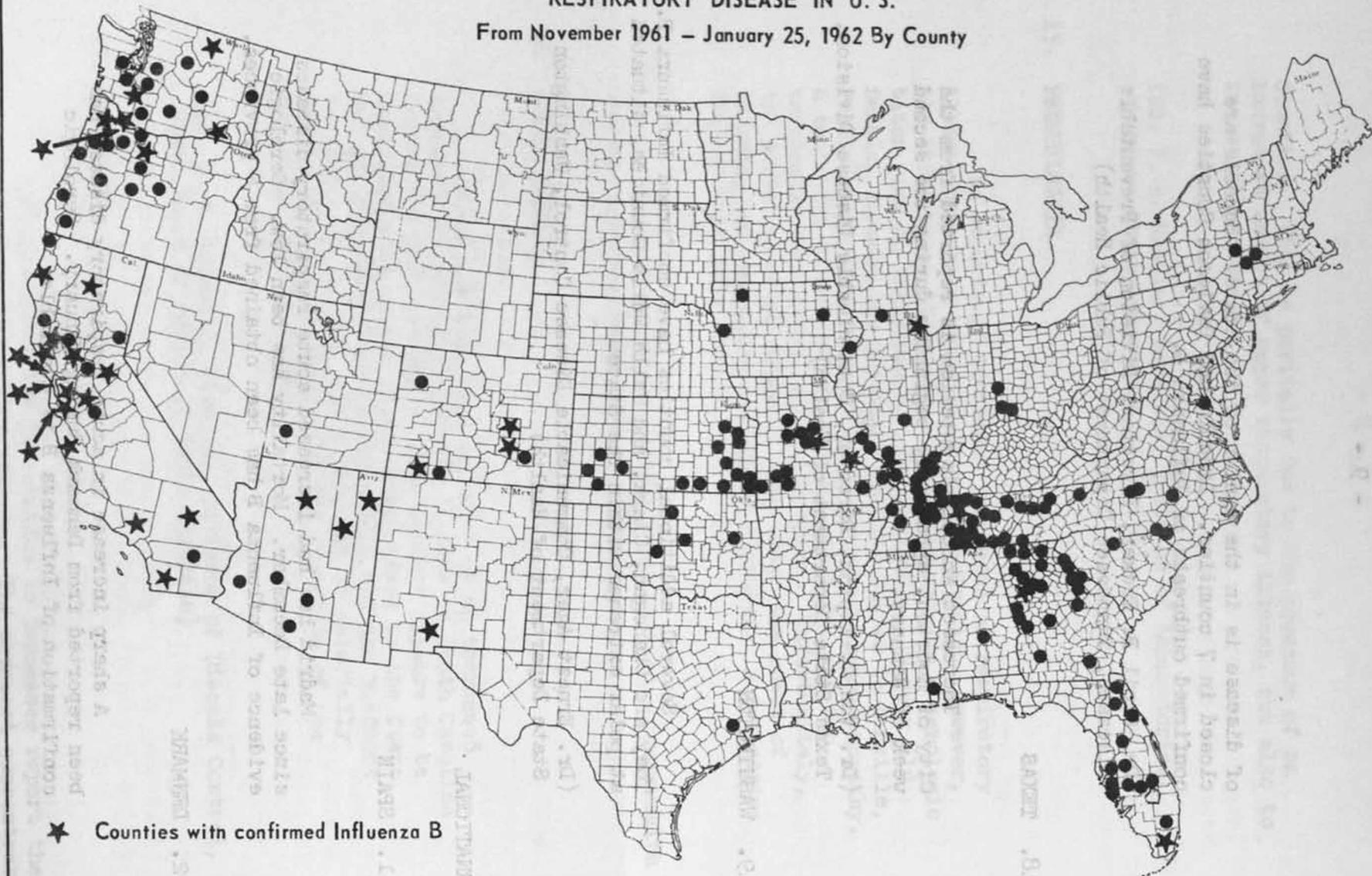
1. SPAIN

Madrid has had increased acute respiratory diseases since late December. Mortality has been low. Serologic evidence of Influenza B has been obtained from 4 provinces.

2. DENMARK

A sharp increase in acute respiratory disease has been reported from Denmark during January. Serologic confirmation of Influenza B is available.

RESPIRATORY DISEASE IN U. S.  
From November 1961 – January 25, 1962 By County



★ Counties with confirmed Influenza B

● Counties with reported outbreaks of acute respiratory disease

### 3. POLAND

Outbreaks of influenza-like disease have been reported from three cities in Poland in recent weeks - Warsaw, Katowice, and Szczecin.

(Associated Press, January 9, 1962)

### 4. NETHERLANDS

Influenza A<sub>2</sub> was isolated from the trachea of a 54-year old Amsterdam woman, following her death on January 6 of an acute staphylococcal tracheo-bronchitis and broncho-pneumonia. Clear signs of virus pneumonia were present. There is no definite epidemic of either Influenza A or B in the Netherlands at this time.

(Prof. Dr. J. Mulder, Academisch Ziekenhuis, Leiden, Netherlands)

## III. INTERFERON

A quantitative assay for interferon in lung specimens from eleven fatal cases of influenzal pneumonia failed to reveal the presence of the potent antiviral substance in any of the specimens, according to Dr. Samuel Baron, a senior U. S. Public Health surgeon, and Dr. Alick Isaacs, of the National Institute for Medical Research, London.

While conceding their findings difficult to interpret because lung extracts from survivors of the disease were not available as controls, the authors observed that it might be possible that the absence of interferon might be related to the fatal outcome.

Influenza virus was isolated from each extract, Drs. Baron and Isaacs said, adding that it was unlikely that any interferon activity in the specimens was destroyed or masked, since they were properly stored and since two of the extracts failed to inhibit added interferon.

(Medical Tribune -- World Wide Report)

IV. WEEKLY PNEUMONIA AND INFLUENZA DEATHS

Deaths due to pneumonia and influenza in 108 cities of the United States rose above the epidemic threshold for the third successive week, the number increasing over the figure reported for last week.

The East North Central States have shown a steady rise over the past three weeks and the epidemic threshold has now been exceeded for two weeks. In the West North Central States pneumonia-influenza deaths remained well above epidemic levels, but decreased from last week's totals. Levels for the West South Central States, which have remained above the threshold for two weeks, increased by almost a third over the number reported last week, and the East South Central States showed an increase above expected numbers.

Deaths in the Mountain States which fell to normal ranges last week, again exceeded epidemic levels this week, and the Pacific States have remained at the epidemic threshold for two successive weeks. The New England and Middle Atlantic States are the only geographic divisions in which pneumonia-influenza deaths remained at normal levels, while the South Atlantic States showed a slight increase over figures reported last week, bringing the number to the epidemic threshold.

